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EXAMINER	
MARSH, OLIVIA MARIE	
ART UNIT	**PAPER NUMBER**
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/27/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/27/2007.

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Office Action Summary	Application No.	Applicant(s)	
	10/725,661	SEGAL ET AL	
	Examiner	Art Unit	
	Olivia Marsh	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20 and 25-33* is/are pending in the application.

4a) Of the above claim(s) *21-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 25-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 16, filed January 24th, 2006, with respect to the rejection(s) of claim(s) 1-2, 12-13, and 25-26 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Coombes *et al* (U.S. 6,138,030). Please review the below rejection for full explanation.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-2, 12-13, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombes *et al* (U.S. 6,138,030) in view of Buttitta *et al* (U.S. 5,913,166).

As to **claim 1**, Coombes discloses:

A wireless communication unit **(102)** arranged and constructed for operation within a loosely coupled communication network comprising a first communication network **(interconnect)** and a second communication network **(dispatch) (column 2, lines 33-39; column 3, lines 28-30)**, the wireless communication unit comprising:

a transceiver **(It is inherent the mobile station comprises a transceiver in order to communicate with the base station 112)** configured to support an air interface with the first communication network and the second communication network **(column 3, lines 28-30)**; and

a controller **(It is inherent that the mobile station must comprise a controller in order to operate)** arranged to control and cooperatively operate with the transceiver to place an active call on-hold to provide an on-hold call at first the communication network **(column 6, lines 1-2)** wherein the on-hold call is created prior to determining that a handout is desired **(column 4, lines 16-20; column 6, lines 12-15)** and thereafter retrieve the on-hold call from the first communication network while the wireless communication unit is operating in the second communication network via a call leg

established for coupling the on-hold call to the wireless communication unit **(column 4, lines 48-55, lines 56-63; column 6, lines 20-26)**.

Coombes discloses a mobile station handing off from one serving area to another (column 4, lines 48-55); however, Coombes fails to disclose a handout from the first communication network to the second communication network. The Examiner contends this feature was old and well known in the art at the time of invention as taught by Buttitta.

Buttitta teaches determining that a handout from the first communication network to the second communication network (column 7, lines 25-34, lines 40-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication unit and handout, disclosed by Coombes, determining that a handout from the first communication network to the second communication network, as taught by Buttita, to enable a mobile user to reestablish an on-hold call in a new communication network.

As to **claim 2**, Coombes and Buttita teach everything as applied in claim 1 above; however, Coombes fails to disclose the controller cooperatively with the transceiver is operable in response to determining that the handout from the first communication network to the second communication network is desired and responsive thereto one of i) passively establish the call leg by receiving and connecting to a call with the first communication network via the second communication network, the call corresponding to the on-hold call and ii) proactively establish the call leg by initiating the call and connecting to the call through calling, via the second communication network, a handout number that terminates in the first communication network thereby resulting in the on-hold call being connected to the call. The Examiner contends this feature was old and well known in the art at the time of invention as taught by Buttita.

Buttitta teaches everything as applied in claim 1 and further teaches if the user still continues to move further out of the private base station coverage area and the private base station is suitably configured, the user dials a feature code to start execution of the mobile station hand of process (column 7, lines 18-24), reading on claimed "the controller cooperatively with the transceiver is operable to determine that a handout from the first communication network to the second communication network is desired." Buttitta also teaches, as previously stated, [Examiner notations in italics]:

> 10) The MS dials the call park feature access number, *reading on claimed "handout number,"* over the cellular network. *Reading on claimed "proactively establish the call leg by initiating the call and connecting to the call through calling, via the second communication network, a handout number."*
>
> 11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "a handout number that terminates in the first communication network."*
>
> 12) The LEC connects the parked party and the call from the MS.
>
> 13) The call with parked party is established with MS through cellular network. *Reading on claimed "thereby resulting in the on hold call being connected to the call."*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication unit and handout, taught by Coombes and Buttitta, the controller cooperatively with the transceiver is operable in response to determining that the handout from the first communication network to the second communication network is desired and responsive thereto one of i) passively establish the call leg by receiving and connecting to a call with the first communication network via the second communication network, the call corresponding to the on-hold call and ii) proactively establish the call leg by initiating the call and connecting to the call through calling, via the second communication network, a handout number that terminates in the first communication network thereby resulting in the on-hold call being connected to the call, as taught by Buttitta, to enable a mobile user to reestablish an on-hold call in a new communication network.

As to **claim 12**, Coombes discloses:

A communication network switch **(114, 108)** operable to route calls for a first **(interconnect)** communication network **(column 2, lines 33-39; column 3, lines 28-30)**, the communication network switch comprising:

a switching function operable to couple the first communication network to a second communication network, where the first communication network and the second communication network comprise a loosely coupled communication network **(Figure 1; column 2, lines 39-42, lines 55-60; column 3, lines 8-11)**; and

a controller arranged to control and cooperatively operate with the switching function to place an active call on-hold responsive to a signal from a communication unit **(column 6, lines 1-2)**, wherein the on-hold call is created prior to determining that a handout is desired **(column 4, lines 16-20; column 6, lines 12-15)**, to provide an on-hold call at the first communication network and thereafter couple, via a call leg to the second communication network, the on-hold call to the wireless communication unit, the call leg established for coupling the on-hold call to the wireless communication unit after a handout of the wireless communication unit and while the wireless communication unit is operating in the second communication network **(column 4, lines 48-55, lines 56-63; column 6, lines 20-26)**.

Coombes discloses a mobile station handing off from one serving area to another (column 4, lines 48-55); however, Coombes fails to disclose a handout from the first communication network to the second communication network. The Examiner contends this feature was old and well known in the art at the time of invention as taught by Buttitta.

Buttitta teaches determining that a handout from the first communication network to the second communication network (column 7, lines 25-34, lines 40-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network and handout, disclosed by Coombes, determining that a handout from the first communication network to the second communication network, as taught by Buttita, to enable a mobile user to reestablish an on-hold call in a new communication network.

As to **claim 13**, Coombes and Buttita teach everything as applied in claim 12 above; however, Coombes fails to disclose the controller and the switching function in response to determining that a handout from the first communication network to the second communication network is desired is further operable to one of i) proactively establish the call leg by forwarding, via the second communications network, the on-hold call to the wireless communication unit and ii) passively establish the call leg by receiving a call from the wireless communication unit via the second communication network that is directed to a handout number and, responsive to receiving the call, connecting a peer call leg of the on-hold call to the call leg as an active call. The Examiner contends this feature was old and well known in the art at the time of invention as taught by Buttitta.

Buttitta teaches everything as applied in claim 12 and further teaches if the user still continues to move further out of the private base station coverage area and the private base station is suitably configured, the user dials a feature code to start execution of the mobile station hand of process (column 7, lines 18-24) and once the handoff is initiated in the private base station 20 by the user of the mobile station 10 the process is executed in which the private base station and the local exchange carrier switch 11 collectively switch the call in progress from an existing wireless communications path established between the private base station and the mobile station to a newly created wireless communications path established between the cellular base station 13 and the mobile station 10, reading on claimed "the controller

cooperatively with the switching function and responsive to determining that a handout from the first communication network to the second communication network is desired." Buttitta also teaches, as previously stated, [Examiner notations in italics]:

> 10) The MS dials the call park feature access number, *reading on claimed "handout number,"* over the cellular network. *Reading on claimed "passively establish the call leg by receiving a call from the wireless communication unit via the second communication network that is directed to a handout number."*
>
> 11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "call leg."*
>
> 12) The LEC connects the parked party and the call from the MS.
> 13) The call with parked party is established with MS through cellular network.
>
> *Steps 11-13, reading on claimed "responsive to receiving the call, connecting a peer call leg of the on hold call to the call leg as an active call."*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network and handout, taught by Coombes and Buttitta, the controller and the switching function in response to determining that a handout from the first communication network to the second communication network is desired is further operable to one of i) proactively establish the call leg by forwarding, via the second communications network, the on-hold call to the wireless communication unit and ii) passively establish the call leg by receiving a call from the wireless communication unit via the second communication network that is directed to a handout number and, responsive to receiving the call, connecting a peer call leg of the on-hold call to the call leg as an active call, as taught by Buttitta, to enable a mobile user to reestablish an on-hold call in a new communication network.

As to **claim 25**, Coombes discloses:

> A method in a communication network switch for routing calls to a wireless communication unit operating in a second communication network, a first and the

second communication network comprising a loosely coupled network **(column 2, lines 33-39; column 3, lines 28-30)**, the method comprising:

placing an active call on-hold responsive to a signal from a communication unit to provide an on-hold call at the first communication network, wherein the on-hold call is created prior to determining that a handout is desired **(column 6, lines 1-2; column 4, lines 16-20; column 6, lines 12-15)**;

establishing a call leg for coupling the on-hold call from the first communication network to the second communication network after determining that the handout from the first communication network to the second network is desired **(column 4, lines 48-55, lines 56-63; column 6, lines 20-26)**; and

coupling the on-hold call, via the call leg, to the wireless communication unit. after the handout of the wireless communication unit and while the wireless communication unit is operating in the second communication network **(column 4, lines 48-55, lines 56-63; column 6, lines 20-26)**.

As to **claim 26**, Coombes and Buttita teach everything as applied in claim 25 above; however, Coombes fails to disclose determining that a handout from the first communication network to the second communication network is desired: and the establishing a call leg is responsive to the determining and further comprises one of: i) proactively establishing the call leg by forwarding, via the second communications network, the on-hold call to the wireless communication unit as an active call; and ii) passively establishing the call leg by receiving a call from the wireless communication unit via the second communication network that is directed to a handout number and, responsive to receiving the call, connecting the peer leg of the on-hold call to the call leg as an active call. The Examiner contends this feature was old and well known in the art at the time of invention as taught by Buttitta.

Buttitta teaches everything as applied in claim 25 and further teaches if the user still continues to move further out of the private base station coverage area and the private base station is suitably configured, the user dials a feature code to start execution of the mobile station hand of process (column 7, lines 18-24) and once the handoff is initiated in the private base station 20 by the user of the mobile station 10 the process is executed in which the private base station and the local exchange carrier switch 11 collectively switch the call in progress from an existing wireless communications path established between the private base station and the mobile station to a newly created wireless communications path established between the cellular base station 13 and the mobile station 10, reading on claimed "determining that a handout from the first communication network to the second communication network and establishing a call leg responsive to the determining." Buttitta also teaches, as previously stated, [Examiner notations in italics]:

> 10) The MS dials the call park feature access number, *reading on claimed "handout number,"* over the cellular network. *Reading on claimed "passively establish the call leg by receiving a call from the wireless communication unit via the second communication network that is directed to a handout number."*
>
> 11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "call leg."*
>
> 12) The LEC connects the parked party and the call from the MS.
>
> 13) The call with parked party is established with MS through cellular network.
>
> *Steps 11-13, reading on claimed "responsive to receiving the call, connecting a peer call leg of the on hold call to the call leg as an active call."*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the method and handout, taught by Coombes and Buttitta, determining that a handout from the first communication network to the second communication network is desired: and the establishing a call leg is responsive to the determining and further comprises one of: i) proactively establishing the call leg by forwarding, via the second communications

network, the on-hold call to the wireless communication unit as an active call; and ii) passively establishing the call leg by receiving a call from the wireless communication unit via the second communication network that is directed to a handout number and, responsive to receiving the call, connecting the peer leg of the on-hold call to the call leg as an active call, as taught by Buttitta, to enable a mobile user to reestablish an on-hold call in a new communication network.

4. Claims 3-11, 14-18, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombes and Buttitta as applied to claims 1, 12, and 25 above, and further in view of Kung *et al* (U.S. 6,633,635 B2).

As to **claim 3**, Coombes and Buttitta teach everything as applied in claims 1 and 2; however, Coombes and Buttitta fails to teach the controller distinguishes the call from other calls within the second communication network by comparing call information to expected call information.

In an analogous art, Kung teaches a subscriber to a call waiting service can have multiple calls waiting on a call queue while involved in another call to enable the subscriber to have three or more incoming calls active simultaneously and switch between the different calls (column 30, lines 22-28), reading on claimed "other calls within the second communication network." Kung also teaches a visual list may be provided to the subscriber (column 32, lines 38-39) and that data such as waiting time and the type of service of the waiting call (column 32, lines 42-44), reading on claimed "call information," and if the service is a data type, the subscriber may be notified of the expected duration of the transmission (column 32, lines 44-45), reading on claimed "controller distinguishes the call from other calls within the second communication network by comparing call information to expected call information."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication unit and the controller, taught by Coombes and Buttitta, to distinguish the call from other calls within the second communication network by comparing call information to expected call information, as taught by Kung, to provide the mobile user a visual indication of the type of service the call on hold is.

As to **claim 4**, Coombes and Buttitta teach everything as applied in claims 1 and 2; however, Coombes and Buttitta fails to teach the on hold call is one of a plurality of on hold calls and the controller orders local on hold call information corresponding to the plurality of on hold calls according to an order for connecting the plurality of on hold calls to the call.

Kung also teaches a subscriber to a call waiting service can have multiple calls waiting on a call queue while involved in another call to enable the subscriber to have three or more incoming calls active simultaneously and switch between the different calls (column 30, lines 22-28), reading on claimed "the on hold call is one of a plurality of on hold calls." Kung also teaches a call manager 218 or the broadband residential gateway 300 may maintain a queue of waiting calls, reading on claimed "local on hold call information," so that the call waiting the longest may be answered in the ordered received (column 32, lines 31-34), reading on claimed "the controller orders local on hold call information corresponding to the plurality of on hold calls according to an order for connecting the plurality of on hold calls to the call.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device and the on hold call, taught by Coombes and Buttitta, to be one of a plurality of on hold calls and the controller orders local on hold call information corresponding to the plurality of on hold calls according to an order for connecting the plurality of on hold calls to the call, as taught by Kung, to provide the user with the capability of choosing which call placed on hold to connect to first.

As to **claim 5** Coombes and Buttitta teach everything as applied in claims 1-2 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claim 4; however, Coombes and Buttitta fails to teach the controller orders the local on hold call information according to an on hold time for each of the plurality of on hold calls.

Kung also teaches a visual list may be provided to the subscriber (column 32, lines 38-39) and that data such as waiting time, reading as claimed "on hold time," and the type of service of the waiting call (column 32, lines 42-44), reading on claimed "controller orders the local on hold call information according to an on hold time for each of the plurality of on hold calls."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device and on hold call, taught by Coombes and Buttitta, to be one of a plurality of on hold calls and the controller orders local on hold call information corresponding to the plurality of on hold calls according to an order for connecting the plurality of on hold calls to the call, taught by Kung, and the controller orders the local on hold call information according to an on hold time for each of the plurality of on hold calls, also taught by Kung, to enable the user to connect the on hold call that has been on hold the longest first.

As to **claim 6**, Coombes and Buttitta teaches everything as applied in claims 1-2 and Buttitta further discloses, in an second protocol, the PBS 20 dials the mobile identification number (MIN) of the MS to place a call to the MS through the cellular network, the cellular network routes the call to the MS and pages the MS, the user at the MS receives the page alert signal and the user of the MS answers and the call is established (column 8, lines 65-67; column 9, lines 1-15), reading on claimed "a user interface and wherein, responsive to an indication from the user interface, the controller cooperatively with the transceiver connects the

call." It is inherent that the MS comprises a user interface in order for the user to receive the page alert signal and to respond to such signal.

However, Coombes and Buttitta fails to teach the user interface provide updated information for the on hold call corresponding to the call.

Kung also teaches the CM 218 and the BRG 300 of the subscriber during the call waiting process; multiple incoming calls to a subscriber may be placed on hold as waiting calls (column 32, lines 28-31). Kung also teaches the identification information, reading on claimed "on hold information for the on hold call," may be sent by the CM 218 to the BRG 300 so that the subscriber may be advised as to the origin of the calls, and can select which call in the queue to switch to from the ongoing call and the subscriber may view the queue of waiting calls and select the desired call from the queue and switch between calls (column 32, lines 34-41), reading on claimed "the user interface provides updated information for the on hold call corresponding to the call."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device, taught by Coombes and Buttitta, to comprise a user interface and wherein, responsive to an indication from the user interface, the controller cooperatively with the transceiver connects the call, also disclosed by Buttitta, and the user interface provides updated information for the on hold call corresponding to the call, as taught by Kung, to provide the mobile user information pertaining the characteristics of the call placed on hold concerning wait time and type of service.

As to **claim 7**, Coombes and Buttitta teaches everything as applied in claims 1-2; however, Coombes and Buttitta fails to teach the controller cooperatively with the transceiver places the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network.

Kung also teaches the when a subscriber is engaged in an ongoing call with a party who is either on the same network as the subscriber or off the network, the BRG assigned to the subscriber can receive packets for an incoming call originating from a party either on or off the same network as the subscriber (column 30, lines 35-40). He further teaches the BRG 300 notifies he subscriber of the incoming call (column 30, lines 66-67) and if the subscriber chooses to answer the incoming call and place the ongoing call on the queue, the BRG 300 can communicate this information to the CM 218 and the resources for the incoming call can be allocated and that call connected to the subscriber in step S760, while the ongoing-call is no longer ongoing and placed on the call queue (column 31, lines 33-39), reading on claimed "places the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device and on hold call, taught by Coombes and Buttitta, to place the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network, as taught by Kung, to enable the user to initiate a new communication or to receive a new communication in the current serving network.

As to **claim 8**, Coombes and Buttitta teach everything as applied in claims 1-2 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claim 7 and Buttitta also teaches the cellular user is provided with a visual notification in the mobile station 10 when the station is registered with the private base station 20 in the private wireless system (column 5, lines 33-36). It is inherent that the mobile station 10 comprises a user interface in order for the cellular user to receive the visual notification. Buttitta also teaches the private base station 20 is configurable to automatically execute the hand off when the mobile station 10 is

moved to the fringe of the coverage area provided by private base station 20 (column 3, lines 48-51), reading on claimed "wherein the establishment of the call leg and the sending hold information corresponding to the call are done automatically." However, Coombes nor Buttitta teaches a user interface maintains on hold information for the on hold call, the on hold call now corresponding to the call that is placed on hold at the second communication network.

Kung also teaches identification information, reading on claimed "on hold information for the on hold call," may be sent by the CM 218 to the BRG 300 so that the subscriber may be advised as to the origin of the calls, and can select which call in the queue to switch to from the ongoing call and the subscriber may view the queue of waiting calls, reading on claimed "on hold call," and select the desired call from the queue and switch between calls (column 32, lines 34-41), reading on claimed "the user interface maintains on hold information for the on hold call, the on hold call now corresponding to the call that is placed on hold at the second communication network."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device, and on hold call, taught by Coombes and Buttitta, to place the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network, as taught by Kung, the user interface and establishment of the call leg and the sending hold information corresponding to the call are done automatically, also taught by Buttitta, and the user interface to maintain on hold information for the on hold call, the on hold call now corresponding to the call that is placed on hold at the second communication network, also taught by Kung, to inform the user of the wireless device the characteristics of the call placed on hold.

As to **claim 9**, Coombes and Buttitta teach everything as applied in claims 1-2 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claim 7; however,

Coombes and Buttitta fails to teach after placing the call on hold at the second communication network, facilitates establishment of an outer call leg by connecting to an other call with the first communication network via the second communication network that corresponds to an other on hold call placed on hold at the first communication network and places the other call on hold at the second communication network by sending hold information corresponding to the other call to the second communication network.

Kung also teaches the BRG 300 monitors whether the subscriber wants to connect to an incoming call or a call waiting on the queue, reading on claimed "an other on hold call," at Step S750. In response to an indication from the subscriber that he is ready to be connected to a call on the queue, the BRG 300 sends a set up request message to the CM 218, the necessary resources are for the call are allocated, reading on claimed "after placing the call on hold at the second communication network, facilitates establishment of an other call leg," and the call is then connected in step S760, reading on claimed "by connecting to an other call with the firs communication network via the second network that corresponds to an other on hold call placed on hold at the first communication network." The subscriber can switch from an active call to a waiting call at any time as in this manner. [Column 32, lines 19-26] Kung further teaches none or almost no bandwidth is consumed between the CM 218 and the BRG 300 of the subscriber during the call waiting process, which enables multiple incoming calls to a subscriber may be placed on hold as waiting calls and the CM 218 or the BRG 300 may maintain a queue of these waiting calls (column 32, lines 28-31), reading on claimed "places the other call on hold at the second communication network by sending hold information corresponding to the other call to the second communication network."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device, taught by Coombes and Buttitta, to

place the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network, as taught by Kung, and after placing the call on hold at the second communication network, facilitates establishment of an outer call leg by connecting to an other call with the first communication network via the second communication network that corresponds to an other on hold call placed on hold at the first communication network and places the other call on hold at the second communication network by sending hold information corresponding to the other call to the second communication network, also taught by Kung, to enable the wireless user to choose which calls placed on hold to activate and communicate with the user on hold.

As to **claim 10**, Coombes and Buttitta teach everything as applied in claims 1-2 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claims 7 and 9; however, Coombes nor Buttitta teaches placing the call on hold at the second communication network, facilitates establishment of an other call leg by connecting to an other call with the first communication network via the second communication network that corresponds to an other active call at the first communication network.

Kung also teaches the BRG 300 monitors whether the subscriber wants to connect to an incoming call, reading on claimed "active call at the first communication network," or a call waiting on the queue at Step S750. In response to an indication from the subscriber that he is ready to be connected to a call on the queue, the BRG 300 sends a set up request message to the CM 218, the necessary resources are for the call are allocated, reading on claimed "after placing the call on hold at the second communication network, facilitates establishment of an other call leg," and the call is then connected in step S760, reading on claimed "by connecting to an other call with the firs communication network via the second network that corresponds to an

other active call placed on hold at the first communication network." The subscriber can switch from an active call to a waiting call at any time as in this manner. [Column 32, lines 19-26]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device, taught by Coombes and Buttitta, to place the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network, as taught by Kung, and after placing the call on hold at the second communication network, facilitates establishment of an outer call leg by connecting to an other call with the first communication network via the second communication network that corresponds to an other on hold call placed on hold at the first communication network and places the other call on hold at the second communication network by sending hold information corresponding to the other call to the second communication network, taught by Kung, and to facilitate the establishment of an other call leg by connecting to an other call with the first communication network via the second communication network that corresponds to an other active call at the first communication network, also taught by Kung, to enable the mobile user to receive an incoming call by placing the current call on hold with the other multiple on hold calls to retrieve at a later time.

As to **claim 11**, Coombes and Buttitta discloses everything as applied in claim 1 and Buttitta further teaches if the user still continues to move further out of the private base station coverage area and the private base station is suitably configured, an impending hand-off tone is sent to the user from the private base station and the mobile station handoff is executed (column 7, lines 18-24), reading on claimed "the controller cooperatively with the transceiver is operable to determine that a handout from the first communication network to the second communication network is desired and responsive thereto, automatically." Buttitta also teaches, as previously stated, [Examiner notations in italics]:

10) The MS dials the call park feature access number, *reading on claimed "calling number,"* over the cellular network. *Reading on claimed "establish the call leg by initiating and connecting to a call through call a number."*

11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "a handout number that terminates in the first communication network."*

12) The LEC connects the parked party and the call from the MS.

13) The call with parked party is established with MS through cellular network.

Steps 10-13, reading on claimed "take the on hold call of hold at the first communication network by sending hold information to the first communication network to provide a corresponding active call and being connected to the call."

However, Coombes nor Buttitta teaches while maintaining the on hold information for the on hold call at the user interface to place the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network.

Kung also teaches the when a subscriber is engaged in an ongoing call with a party who is either on the same network as the subscriber or off the network, the BRG assigned to the subscriber can receive packets for an incoming call originating from a party either on or off the same network as the subscriber (column 30, lines 35-40). He further teaches the BRG 300 notifies he subscriber of the incoming call (column 30, lines 66-67) and if the subscriber chooses to answer the incoming call and place the ongoing call on the queue, the BRG 300 can communicate this information to the CM 218 and the resources for the incoming call can be allocated and that call connected to the subscriber in step S760, while the ongoing-call is no longer ongoing and placed on the call queue (column 31, lines 33-39), reading on claimed "places the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network." Kung further teaches identification information, reading on claimed "on hold information for the on hold call," may be sent by the CM 218 to the BRG 300 so that the subscriber may be advised as to the origin of

the calls, and can select which call in the queue to switch to from the ongoing call and the subscriber may view the queue of waiting calls, reading on claimed "on hold call," and select the desired call from the queue and switch between calls (column 32, lines 34-41), reading on claimed "while maintaining the on hold information for the on hold call at the user interface."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the wireless communication device, taught by Coombes and Buttitta, and to determine that a handout from the first communication network to the second communication network is desired and responsive thereto, automatically, to take the on hold call off of hold at the first communication network by sending hold information to the first communication network to provide a corresponding active call and to establish the call leg by initiating and connecting to a call through calling a number that results in the on hold call that is taken off of hold at the first communication network being connected to the call, also taught by Buttitta, to placed the call on hold at the second communication network by sending hold information corresponding to the call to the second communication network while maintaining the on hold information for the on hold call at the user interface, as taught by Kung, to enable the user to initiate a new communication or to receive a new communication in the current serving network to inform the user of the wireless device the characteristics of the call placed on hold.

As to **claim 14**, Coombes and Buttitta teach everything as applied in claims 12-13; however, Coombes nor Buttitta teaches to hand out an active call for the wireless communication unit at the first network by establishing an other call leg by forwarding, via the second communications network, the active call for the wireless communication unit after the on hold call has been forwarded and responsive to the on hold call being connected by the wireless communication unit.

Kung also teaches if the subscriber chooses to answer the incoming call, reading on claimed "active call," and place the ongoing call on queue, the BRG 300 can communicate this information to the CM 218 and the resources for the incoming call can be allocated, reading on claimed "an other call leg," and that call connected to the subscriber while the on going call is no longer ongoing and placed on the call queue (column 31, lines 33-39), reading on claimed "to hand out an active call for the wireless communication unit at the first network by establishing an other call leg by forwarding, via the second communications network, the active call for the wireless communication unit after the on hold call has been forwarded and responsive to the on hold call being connected by the wireless communication unit."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network switch, taught by Coombes and Buttitta, to hand out an active call for the wireless communication unit at the first network by establishing an other call leg by forwarding, via the second communications network, the active call for the wireless communication unit after the on hold call has been forwarded and responsive to the on hold call being connected by the wireless communication unit, as taught by Kung, to enable the mobile user to respond to calls directed to the mobile user's previous location while the mobile user is operating in a new network.

As to **claim 15**, Coombes and Buttitta teaches everything as applied in claims 12-13 and also discloses, as stated previously, in order to obtain a call within the private system served by PBS 20 while CBS 13 is serving the MS:

> 10) The MS dials the call park feature access number; *reading on claimed "an other handout number" and "other call,"* over the cellular network.
>
> 11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "other call leg."*
>
> 12) The LEC connects the parked party and the call from the MS.

13) The call with parked party is established with MS through cellular network.

However, Coombes nor Buttitta teaches to hand out an active call for the communication unit at the first network after the coupling of the on hold call to the wireless communication unit by establishing another call leg by receiving an other call from the wireless communication unit via the second communication network that is directed to an other handout number and responsive to receiving the other call, connecting the active call to the other call leg.

Kung also teaches if the subscriber chooses to answer the incoming call, reading on claimed "active call," and place the ongoing call on queue, the BRG 300 can communicate this information to the CM 218 and the resources for the incoming call can be allocated, reading on claimed "an other call leg," and that call connected to the subscriber while the on going call is no longer ongoing and placed on the call queue (column 31, lines 33-39), reading on claimed "to hand out an active call for the communication unit at the first network after the coupling of the on hold call to the wireless communication unit by establishing another call leg by receiving an other call from the wireless communication unit via the second communication network that is directed to an other handout number and responsive to receiving the other call, connecting the active call to the other call leg."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network switch, taught by Coombes and Buttitta, an other handout number, also taught by Buttitta, to hand out an active call for the communication unit at the first network after the coupling of the on hold call to the wireless communication unit by establishing another call leg by receiving an other call from the wireless communication unit via the second communication network that is directed to an other handout number and responsive to receiving the other call, connecting the active call to the other call leg, as taught

by Kung, to enable the mobile user to respond to calls directed to the mobile user's previous location while the mobile user is operating in a new network.

As to **claim 16**, Coombes and Buttitta teach everything as applied in claims 12-13; however Coombes nor Buttitta teaches the on hold call is one of a plurality of on hold calls and the controller is operable to order the plurality of on hold calls according to a predetermined attribute of the respective on hold calls.

Kung also teaches a subscriber to a call waiting service can have multiple calls waiting on a call queue while involved in another call to enable the subscriber to have three or more incoming calls active simultaneously and switch between the different calls (column 30, lines 22-28), reading on claimed "the on hold call is one of a plurality of on hold calls." Kung also teaches a call manager 218 or the broadband residential gateway 300 may maintain a queue of waiting calls so that the call waiting the longest, reading on claimed "predetermined attribute of the respective on hold calls," may be answered in the ordered received (column 32, lines 31-34), reading on claimed "the controller is operable to order the plurality of on hold calls according to a predetermined attribute of the respective on hold calls."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network switch and the on hold call, taught by Coombes and Buttitta, to be one of a plurality of on hold calls and the controller is operable to order the plurality of on hold calls according to a predetermined attribute of the respective on hold calls, as taught by Kung, to provide the user with the capability of choosing which call placed on hold to connect to first.

As to **claim 17**, Coombes and Buttitta teach everything as applied in claims 12-13 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claim 16; however, Coombes nor Buttitta teach to hand out an other hold call for the wireless

communication unit at the first communication network by establishing an other call leg by forwarding, via the second communications network, the second on hold call to the wireless communication unit after the on hold call has been forwarded and connected by the wireless communication network.

Kung also teaches the BRG 300 monitors whether the subscriber wants to connect to an incoming call or a call waiting on the queue, reading on claimed "an other on hold call" and "second on hold call," at Step S750. In response to an indication from the subscriber that he is ready to be connected to a call on the queue, the BRG 300 sends a set up request message to the CM 218, the necessary resources are for the call are allocated, reading on claimed "to hand out an other on hold call for the wireless communication unit at the first communication network by establishing an other call leg," and the call is then connected in step S760, reading on claimed "forwarding, via the second communication network, the second on hold call to the wireless communication unit after the on hold call has been forwarded and connected by the wireless communication unit." The subscriber can switch from an active call to a waiting call at any time as in this manner. [Column 32, lines 19-26]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network switch, taught by Coombes and Buttitta, to hand out an other hold call for the wireless communication unit at the first communication network by establishing an other call leg by forwarding, via the second communications network, the second on hold call to the wireless communication unit after the on hold call has been forwarded and connected by the wireless communication network, taught by Kung, to enable the wireless user to choose which calls placed on hold to activate and to communicate with the user on hold.

As to **claim 18**, Coombes and Buttitta teach everything as applied in claims 12-13 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claim 16;

Buttitta also teaches, as stated previously, in order to obtain a call within the private system served by PBS 20 while CBS 13 is serving the MS:

> 10) The MS dials the call park feature access number, *reading on claimed "receiving an other call from the wireless communication unit via the second communication network that is directed to a second handover number"* over the cellular network.
>
> 11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "other call leg."*
>
> 12) The LEC connects the parked party and the call from the MS.
>
> 13) The call with parked party is established with MS through cellular network.

However, Coombes and Buttitta fail to teach to hand out an other on hold call for the wireless communication unit at the first communication network after the on hold call has been connected to the call leg by establishing an other call leg and responsive to receiving the other call, connecting the other on hold call to the other call leg.

Kung also teaches the BRG 300 monitors whether the subscriber wants to connect to an incoming call or a call waiting on the queue, reading on claimed "an other on hold call," at Step S750. In response to an indication from the subscriber that he is ready to be connected to a call on the queue, the BRG 300 sends a set up request message to the CM 218, the necessary resources are for the call are allocated, reading on claimed "to hand out an other on hold call for the wireless communication unit at the first communication network after the on hold call has been connected to the call leg by establishing an other call leg," and the call is then connected in step S760, reading on claimed "responsive to receiving the other call, connecting the other on hold call to the other call leg." The subscriber can switch from an active call to a waiting call at any time as in this manner. [Column 32, lines 19-26]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network switch, taught by Coombes and Buttitta, receiving an other call from the wireless communication unit via the second communication

network, also taught by Buttitta, to hand out an other on hold call for the wireless communication unit at the first communication network after the on hold call has been connected to the call leg by establishing an other call leg and responsive to receiving the other call, connecting the other on hold call to the other call leg, as taught by Kung, to enable the mobile user to retrieve other on hold calls within the previous serving network if the current serving network could not support the mobile user communicating on multiple separate calls simultaneously.

As to **claim 27**, Coombes and Buttitta teach everything as applied in claims 25-26; however, Coombes and Buttitta fail to teach handing out an active call for the wireless communication unit by establishing an other call leg by forwarding, via the second communications network, the active call for the wireless communication unit after the on hold call has been forwarded and responsive to the on hold call being connected by the wireless communication unit.

Kung also teaches if the subscriber chooses to answer the incoming call, reading on claimed "active call," and place the ongoing call on queue, the BRG 300 can communicate this information to the CM 218 and the resources for the incoming call can be allocated, reading on claimed "an other call leg," and that call connected to the subscriber while the on going call is no longer ongoing and placed on the call queue (column 31, lines 33-39), reading on claimed "handing out an active call for the wireless communication unit by establishing an other call leg by forwarding, via the second communications network, the active call for the wireless communication unit after the on hold call has been forwarded and responsive to the on hold call being connected by the wireless communication unit."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the method, taught by Coombes and Buttitta, to include the step of handing out an active call for the wireless communication unit by establishing an other call leg by

forwarding, via the second communications network, the active call for the wireless communication unit after the on hold call has been forwarded and responsive to the on hold call being connected by the wireless communication unit, as taught by Kung, to enable the mobile user to respond to calls directed to the mobile user's previous location while the mobile user is operating in a new network.

As to **claim 28**, Coombes and Buttitta teach everything as applied in claims 25-26 and Buttitta also teaches, as stated previously, in order to obtain a call within the private system served by PBS 20 while CBS 13 is serving the MS:

> 10) The MS dials the call park feature access number; *reading on claimed "a second handout number" and "other call,"* over the cellular network.
>
> 11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "other call leg."*
>
> 12) The LEC connects the parked party and the call from the MS.
>
> 13) The call with parked party is established with MS through cellular network.

However, Coombes and Buttitta fail to teach to handing out an active call for the communication unit after the coupling of the on hold call to the wireless communication unit by establishing an other call leg by receiving an other call from the wireless communication unit via the second communication network that is directed to a second handout number and responsive to receiving the other call, connecting the active call to the other call leg.

Kung also teaches if the subscriber chooses to answer the incoming call, reading on claimed "active call," and place the ongoing call on queue, the BRG 300 can communicate this information to the CM 218 and the resources for the incoming call can be allocated, reading on claimed "an other call leg," and that call connected to the subscriber while the on going call is no longer ongoing and placed on the call queue (column 31, lines 33-39), reading on claimed "handing out an active call for the communication unit after the coupling of the on hold call to the

wireless communication unit by establishing another call leg by receiving an other call from the wireless communication unit via the second communication network that is directed to a second handout number and responsive to receiving the other call, connecting the active call to the other call leg."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require method, taught by Coombes and Buttitta, second handout number and other call, also taught by Buttitta, the step of handing out an active call for the communication unit after the coupling of the on hold call to the wireless communication unit by establishing another call leg by receiving an other call from the wireless communication unit via the second communication network that is directed to a second handout number and responsive to receiving the other call, connecting the active call to the other call leg, as taught by Kung, to enable the mobile user to respond to calls directed to the mobile user's previous location while the mobile user is operating in a new network.

As to **claim 29**, Coombes and Buttitta teach everything as applied in claims 25-26; however Coombes and Buttitta fail to teach the on hold call is one of a plurality of on hold calls and the method further comprises ordering the plurality of on hold calls according to a predetermined attribute of the respective on hold calls.

Kung also teaches a subscriber to a call waiting service can have multiple calls waiting on a call queue while involved in another call to enable the subscriber to have three or more incoming calls active simultaneously and switch between the different calls (column 30, lines 22-28), reading on claimed "the on hold call is one of a plurality of on hold calls." Kung also teaches a call manager 218 or the broadband residential gateway 300 may maintain a queue of waiting calls so that the call waiting the longest, reading on claimed "predetermined attribute of the respective on hold calls," may be answered in the ordered received (column 32, lines 31-34),

reading on claimed "ordering the plurality of on hold calls according to a predetermined attribute of the respective on hold calls."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the method, taught by Coombes and Buttitta, that the on hold call is one of a plurality of on hold calls and step of ordering the plurality of on hold calls according to a predetermined attribute of the respective on hold calls, as taught by Kung, to provide the user with the capability of choosing which call placed on hold to connect to first.

As to **claim 30**, Coombes and Buttitta teaches everything as applied in claims 25-26 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claim 29; however, Coombes and Buttitta fail to teach handing out a second on hold call for the communication unit at the first communication network by establishing an other call leg by forwarding, via the second communications network, the second on hold call to the wireless communication unit after the on hold call has been forwarded and connected by the wireless communication network.

Kung also teaches the BRG 300 monitors whether the subscriber wants to connect to an incoming call or a call waiting on the queue, reading on claimed "a second on hold call" at Step S750. In response to an indication from the subscriber that he is ready to be connected to a call on the queue, the BRG 300 sends a set up request message to the CM 218, the necessary resources are for the call are allocated, reading on claimed "handing out a second on hold call for the wireless communication unit at the first communication network by establishing an other call leg," and the call is then connected in step S760, reading on claimed "forwarding, via the second communication network, the second on hold call to the wireless communication unit after the on hold call has been forwarded and connected by the wireless communication unit."

The subscriber can switch from an active call to a waiting call at any time as in this manner. [Column 32, lines 19-26]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the method, taught by Buttitta, the step of handing out a second on hold call for the wireless communication unit at the first communication network by establishing an other call leg by forwarding, via the second communications network, the second on hold call to the wireless communication unit after the on hold call has been forwarded and connected by the wireless communication network, taught by Kung, to enable the wireless user to choose which calls placed on hold to activate and to communicate with the user on hold.

As to **claim 31**, Coombes and Buttitta teach everything as applied in claims 25-26 and the combination of Coombes, Buttitta and Kung teaches everything as applied in claim 29; Buttitta also teaches, as stated previously, in order to obtain a call within the private system served by PBS 20 while CBS 13 is serving the MS:

> 10) The MS dials the call park feature access number, *reading on claimed "receiving an other call from the wireless communication unit via the second communication network that is directed to a second handover number"* over the cellular network.
>
> 11) The cellular network routes the call park feature access number to the LEC. *Reading on claimed "other call leg."*
>
> 12) The LEC connects the parked party and the call from the MS.
>
> 13) The call with parked party is established with MS through cellular network.

However, Coombes and Buttitta fail to teach handing out a second on hold call for the communication unit after the on hold call has been connected to the call leg and thus to the wireless communication unit by establishing an other call leg and responsive to receiving the other call, connecting the other on hold call to the other call leg.

Kung also teaches the BRG 300 monitors whether the subscriber wants to connect to an incoming call or a call waiting on the queue, reading on claimed "a second on hold call," at

Step S750. In response to an indication from the subscriber that he is ready to be connected to a call on the queue, the BRG 300 sends a set up request message to the CM 218, the necessary resources are for the call are allocated, reading on claimed "handing out a second on hold call for the wireless communication unit after the on hold call has been connected to the call leg and thus the wireless communication unit by establishing an other call leg," and the call is then connected in step S760, reading on claimed "responsive to receiving the other call, connecting the other on hold call to the other call leg." The subscriber can switch from an active call to a waiting call at any time as in this manner. [Column 32, lines 19-26]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the method, taught by Coombes and Buttitta, receiving an other call from the wireless communication unit via the second communication network, also disclosed by Buttitta, the step of handing out an other on hold call for the wireless communication unit after the on hold call has been connected to the call leg and thus to the wireless communication unit by establishing an other call leg and responsive to receiving the other call, connecting the other on hold call to the other call leg, as taught by Kung, to enable the mobile user to retrieve other on hold calls within the previous serving network if the current serving network could not support the mobile user communicating on multiple separate calls simultaneously.

5. Claims 19 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Coombes and Buttitta as applied in claims 12-13 and 25-26 above, and further in view of well known prior art (MPEP 2144.03).

As to **claim 19**, Coombes and Buttitta discloses everything as applied in claims 12-13 and Buttitta also teaches a mobile station can search for a private base station's control channel transmission using a number of techniques, including: a mobile station user manually directing

the mobile station to search for the private base station or the mobile station, upon finding the control channel of the private base station, automatically goes through a series of controlled procedures to obtain registration with the private base station, both methods reading on claimed "determining that a hand in of the wireless communication unit from the second communication network to the first communication network is desired." [Column 5, lines 3-9] Once a mobile station, for example, station 10, obtains a successful registration with the private base station 20, the private base station 20 makes a modem connection to the private base station visiting location register 30 to update the mobile station's temporary listed directory number (TLDN). The temporary listed directory number in this case is the private base station's landline number (LLN). Hence, when an incoming call is directed to a particular mobile station, information including the temporary listed directory number for this mobile station is accessed from the private base station visiting locating register 30 through the home location register 15 or the visiting location register 16 and the call is routed to the private base station's LLN, reading on claimed "call leg." The private base station 20 detects the ring for an incoming call and sends an alerting signal or page to the registered mobile station. Following the mobile station's response to the alerting signal, private base station 20 establishes a traffic channel, reading on claimed "active call leg," for the mobile station and generates an off-hook condition to connect the incoming call through the private base station to the mobile station, reading on claimed "establishes an active call leg with the wireless communication unit in the first communication network and connects the call leg to the active call leg." [column 5, lines 10-32]

However, Coombes and Buttitta fail to teach the mobile user places an active call on hold in the second communications network and connects the on hold call to the wireless communication unit via the first communication network.

The Examiner takes Official notice that it was old and well known in the art at the time of invention to place a call on hold in a cellular system and, in light of Buttitta, to transfer the on hold call to network in which the mobile station roams to.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communication network switch and switching of the on hold call, taught by Coombes and Buttitta, determining that a hand in of the wireless communication unit from the second communication network to the first communication network is desired, establishes an active call leg with the wireless communication in the first communication network and connects the call leg to the active call leg, also taught by Buttitta, and connecting the on hold call to the wireless communication unit via the first communication network, in view of well known prior art, to enable the wireless device to return to the private network after roaming to the public cellular network without dropping the call in the public cellular network.

As to **claim 32**, Coombes and Buttitta teaches everything as applied in claims 25-26 and also discloses a mobile station can search for a private base station's control channel transmission using a number of techniques, including: a mobile station user manually directing the mobile station to search for the private base station or the mobile station, upon finding the control channel of the private base station, automatically goes through a series of controlled procedures to obtain registration with the private base station, both methods reading on claimed "determining that a hand in of the wireless communication unit from the second communication network to the first communication network is desired." [Column 5, lines 3-9] Once a mobile station, for example, station 10, obtains a successful registration with the private base station 20, the private base station 20 makes a modem connection to the private base station visiting location register 30 to update the mobile station's temporary listed directory number (TLDN). The temporary listed directory number in this case is the private base station's landline number

(LLN). Hence, when an incoming call is directed to a particular mobile station, information including the temporary listed directory number for this mobile station is accessed from the private base station visiting locating register 30 through the home location register 15 or the visiting location register 16 and the call is routed to the private base station's LLN, reading on claimed "call leg." It is also understood that the temporary listed directory number may be stored in either the home location register 15 or the visiting location register 16, and the mobile switching center 12 then accesses this TLDN from this register. The private base station 20 detects the ring for an incoming call and sends an alerting signal or page to the registered mobile station. Following the mobile station's response to the alerting signal, private base station 20 establishes a traffic channel, reading on claimed "active call leg," for the mobile station and generates an off-hook condition to connect the incoming call through the private base station to the mobile station, reading on claimed "establishing, responsive to the determining that a hand in is desired, an active call leg with the wireless communication unit in the first communication network: and connecting the call leg to the active call leg." [Column 5, lines 10-32]

However, Coombes and Buttitta fail to teach the mobile user places an active call on hold in the second communications network and connects the on hold call to the wireless communication unit via the first communication network.

The Examiner takes Official notice that it was old and well known in the art at the time of invention to place a call on hold in a cellular system and, in light of Buttitta, to transfer the on hold call to network in which the mobile station roams to.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the method, taught by Coombes and Buttitta, determining that a hand in of the wireless communication unit from the second communication network to the first

communication network is desired, establishing, responsive to the determining that a hand in is desired, an active call leg with the wireless communication in the first communication network: and connecting the call leg to the active call leg, also taught by Buttitta, the step of connecting the on hold call at the second communication network to the wireless communication unit via the first communication network, in view of well known prior art, to enable the wireless device to return to the private network after roaming to the public cellular network without dropping the call in the public cellular network.

6. Claims 20 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombes and Buttitta as applied to claims 12-13 and 25-26 above in view of well known prior art (MPEP 2144.03) as applied in claims 19 and 32 above, and further in view of Kung *et al* (U.S. 6,633,635).

As to **claim 20**, Coombes and Buttitta teach everything as applied in claims 12-13 and well known prior art teaches everything as applied in claim 19; however, neither disclose the switching function receives a signal from the wireless communication unit directing that the active call leg be placed on hold.

In an analogous art, Kung teaches that when a subscriber is engaged in an ongoing call with a party who is either on the same network as the subscriber or off the network, the BRG assigned to the subscriber can receive packets for an incoming call originating from a party either on or off the same network as the subscriber (column 30, lines 35-40). He further teaches the BRG 300 notifies he subscriber of the incoming call (column 30, lines 66-67) and if the subscriber chooses to answer the incoming call, reading on claimed "receives a signal from the wireless communication unit," and place the ongoing call on the queue, reading on claimed "directing that the active call be placed on hold," the BRG 300 can communicate this information

to the CM 218 and the resources for the incoming call can be allocated and that call connected to the subscriber in step S760, while the ongoing-call is no longer ongoing and placed on the call queue (column 31, lines 33-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the communications network switch and on hold call, taught by Coombes and Buttitta, determining that a hand in of the wireless communication unit from the second communication network to the first communication network is desired, establishes an active call leg with the wireless communication in the first communication network and connects the call leg to the active call leg, also taught by Buttitta, and connecting the on hold call to the wireless communication unit via the first communication network, in view of well known prior art, and the control with the switching function receives a signal from the wireless communication unit directing that the active call be placed on hold, as taught by Kung, to enable the mobile device to answer an incoming call from the private system.

As to **claim 33**, Coombes and Buttitta teaches everything as applied in claims 25-26 and well known prior art teaches everything as applied in claim 32; however, neither disclose receiving a signal from the wireless communication unit directing that the active call leg be placed on hold.

In an analogous art, Kung teaches that when a subscriber is engaged in an ongoing call with a party who is either on the same network as the subscriber or off the network, the BRG assigned to the subscriber can receive packets for an incoming call originating from a party either on or off the same network as the subscriber (column 30, lines 35-40). He further teaches the BRG 300 notifies he subscriber of the incoming call (column 30, lines 66-67) and if the subscriber chooses to answer the incoming call, reading on claimed "receives a signal from the wireless communication unit," and place the ongoing call on the queue, reading on claimed

"directing that the active call be placed on hold," the BRG 300 can communicate this information to the CM 218 and the resources for the incoming call can be allocated and that call connected to the subscriber in step S760, while the ongoing-call is no longer ongoing and placed on the call queue (column 31, lines 33-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to require the method, taught by Coombes and Buttitta, determining that a hand in of the wireless communication unit from the second communication network to the first communication network is desired, establishing, responsive to the determining that a hand in is desired, an active call leg with the wireless communication in the first communication network: and connecting the call leg to the active call leg, also taught by Buttitta, connecting the on hold call at the second communication network to the wireless communication unit via the first communication network, in view of well known prior art, the step of receiving a signal from the wireless communication unit directing that the active call be placed on hold, as taught by Kung, to enable the mobile device to answer an incoming call from the private system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olivia Marsh whose telephone number is 571-272-7912. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHARLES APPIAH
PRIMARY EXAMINER